

Section 719—Silt Filter Bag

719.1 General Description

This Specification provides the requirements for furnishing and installing a silt filter bag to trap dissolved silt when pumping accumulated water from sediment basins or other areas where water may accumulate.

719.1.01 Definitions

General Provisions 101 through 150.

719.1.02 Related References

A. Standard Specifications

General Provisions 101 through 150.

B. Referenced Documents

ASTM D 3776

ASTM D 4632

ASTM D 4833

ASTM D 4491

ASTM D 3786

ASTM D 4991

ASTM D 4355

ASTM D 4751

ASTM D 4884

719.1.03 Submittals

General Provisions 101 through 150.

719.2 Materials

Ensure that all materials meet the requirements of the following:

A. Fabric

The silt filter bag fabric shall be a non-woven geotextile conforming to the following properties:

Property	Minimum Value	Test Method
Weight	10 oz/yd ² (340 g/m ²)	ASTM D 3776
Tensile strength (minimum average of 5 specimens)	270 lb (1100 N)	ASTM D 4632
Puncture Resistance,	150 lb (730 N)	ASTM D 4833
Initial Flowrate	70 gal/min-ft ² (3500 L/min- m ²)	ASTM D 4491
Bursting Strength	550 psi (3800 kPa)	ASTM D 3786
Permitivity	1.3 sec ⁻¹	ASTM D 4991
UV Stability, 70% of initial Tensile Strength	173 lb (770 N)	ASTM D 4355
AOS Retained	100%	ASTM D 4751

B. Seams

All seams shall be sewn with a double needle machine using a high strength thread. The seams shall have a minimum average wide-width strength of 100 lb/in (17.5 N/mm) when tested according to ASTM D 4884.

C. Opening

Provide a silt filter bag with an opening to accommodate a 6" (150 mm) hose.

719.2.01 Delivery, Storage, and Handling

General Provisions 101 through 150.

719.3 Construction Requirements**719.3.01 Personnel**

General Provisions 101 through 150.

719.3.02 Equipment

General Provisions 101 through 150.

719.3.03 Preparation

General Provisions 101 through 150.

719.3.04 Fabrication

General Provisions 101 through 150.

719.3.05 Construction

1. Place the silt filter bag on a #57 stone gravel bed sloped to ensure that the filtered water will exit at the desired location. Chose the exit location to prevent erosion.
2. Extend the pump hose past the inlet opening to ensure that the silt-laden water will discharge in the center of the bag. Ensure that the seal between the inlet and hose is watertight.
3. When the filter bag is full of silt and cannot readily pass any more water, use a new filter bag. If approved by the Engineer, bury the full filter bag on site or remove the top section of fabric and seed the exposed filtrate.

The size and number of silt filter bags will be shown on the Plans or determined by the Engineer.

719.3.06 Quality Acceptance

General Provisions 101 through 150.

719.3.07 Contractor Warranty and Maintenance

Continue water filtration as directed by the Engineer.

719.4 Measurement

Silt filter bags measured for payment will be the actual number of bags used for filtration, complete and accepted.

719.4.01 Limits

General Provisions 101 through 150.

719.5 Payment

Payment will be made under:

Item No. 719.	Silt filter bag	Per each
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719.5.01 Adjustments

General Provisions 101 through 150.

Section 720—Triangular Silt Barrier**720.1 General Description**

The work covered by this section consists of furnishing, installing, and removing water-permeable triangular silt barriers used to remove suspended particles from drainage water.

720.1.01 Definitions

General Provisions 101 through 150.